

Patent claims

1. Personal cooling element, particularly for patients, with at least one cooling zone (2), wherein elastic means (7) are provided to pre-tension the cooling zone (2) against the body surface (10) of a person wearing the personal cooling element, characterized in that the cooling zone (2) is three-layered with an internal layer (4) facing towards the body, an external layer (6) facing away from the body and an evaporation zone (8) arranged therebetween, wherein the internal layer (4) and the external layer (6) each are made from a material that is waterproof and permeable to water vapor, and wherein water supply means (14, 16) are present to supply the evaporation zone (8) with liquid water.  
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- 10 2. Personal cooling element according to claim 1, characterized in that the evaporation zone (8) is made from a hydrophilic material.
- 15 3. Personal cooling element according to claim 1 or 2, characterized in that the evaporation zone (8) comprises a channel system.
- 20 4. Personal cooling element according to any one of claims 1 to 3, characterized in that the external layer (6) has a thickness of 1 to 5  $\mu\text{m}$ .
- 25 5. Personal cooling element according to any one of claims 1 to 4, characterized in that the internal layer (4) has a thickness of 10 to 20  $\mu\text{m}$ .
- 30 6. Personal cooling element according to any one of claims 1 to 5, characterized in that the internal layer (4) and the external layer (6) are connected to form a lateral seal (12) of the evaporation zone (8).

7. Personal cooling element according to any one of claims 1 to 6, characterized in that it is formed as a garment.
8. Personal cooling element according to any one of claims 1 to 7, 5 characterized in that the cooling zone (2) is formed for a tight fit to at least one selected body part.
9. Personal cooling element according to any one of claims 1 to 8, 10 characterized in that the water supply means comprise a water supply system (14) connected to a pump.
10. A method of cooling body parts by means of the personal cooling element according to any one of claims 1 to 9, characterized in that the personal cooling element is brought into close contact with the 15 skin of a body part to be cooled and is pre-tensioned against the same, and that the evaporation zone is supplied continuously or intermittently with water.